

REMARKS

In a Final Office Action mailed on March 3, 2004, the Examiner maintained the § 112, second paragraph rejections of claims 1-30; maintained the § 102(e) rejections of claims 1-7, 9-17, 19-27, 29 and 30 in view of van Nee; and maintained the § 103(a) rejections of claims 8, 18 and 28 as being unpatentable over van Nee in view of Bohnke. The specification has been amended to correct a typographical error. The remaining §§ 102, 103 and 112 rejections are discussed below.

§ 112 Rejections:

The Examiner fails to set forth a proper basis for sustaining the § 112, second paragraph rejections. More specifically, the Examiner contends that the phrase "discrete frequency transformation" is unclear, "because it is not described in the specification or well known in the art." Contrary to the Examiner's contention, however, there is no requirement in section 112 that a claim term be literally described in the specification. *Nelson v. Bower*, 1 USPQ2d 2076, 2078 (Bd. Pat. App. & Int'l 1986). The test to determine whether a particular claim term complies with the second paragraph of § 112 requires the determination that a.) the claims set forth a subject matter that applicants regard as their invention; and b.) the claims must particularly point out and distinctly define the metes and bounds of the subject matter that will be protected by the patent grant. M.P.E.P. § 2171. Lines 19-25 on page 9 of the specification makes it clear that the term "discrete frequency transformation" may refer either to an IDFT or a DFT. Thus, one skilled in the art would recognize that "discrete frequency transformation" is a genus term that includes such species as an IDFT and a DFT. Applicants do not wish to limit the invention to only a DFT or an IDFT. Rather, Applicant desires to maintain the claim breadth by using the language "discrete frequency transformation," as the Examiner fails to show a proper basis for sustaining the § 112, second paragraph rejection of the claims. It appears that the Examiner maintains the § 112 rejections due to the breadth of the claim language. However, "claim breadth is not to be equated with indefiniteness." M.P.E.P. § 2172.03.

Thus, withdrawal of the § 112, second paragraph rejections of claims 1-30 is requested.

§§ 102 and 103 Rejections:

In the latest Office Action, the Examiner states, "exclusion of mathematical operations associated with dropped carriers is an inherent part of van Nee system, "because, performing mathematical operation with no input 'drop carriers' is not an acceptable practice." Final Office Action, 5. However, the Examiner's conclusion that excluding such mathematical operations is untenable, as the Examiner provides no support for this conclusion.

For a limitation to be inherent in a reference, the limitation must necessarily flow from the reference. M.P.E.P. § 2122; *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). The Examiner has made no showing why the omission of mathematical operations associated with subcarriers that are not being used are necessarily excluded from the IFFT specification that is described in van Nee. In this manner, the Examiner, "must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied art." *Ex parte Levy*, 17 USPQ2d at 1464; M.P.E.P. § 2122. Not only does not the missing claim limitations fail to necessarily flow from van Nee, a clear alternative exists, i.e., the alternative of performing mathematical operations with zero input subcarriers. The recognition that the exclusion of the mathematical operations would enhance performance is based solely on the hindsight gleaned from the current application. However, the Examiner fails to show why the missing claim limitations necessarily flow from van Nee.

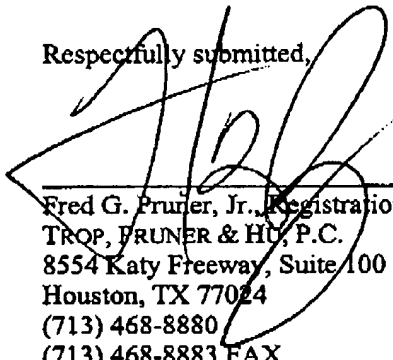
Thus, for at least the reason that van Nee fails to implicitly, inherently or explicitly teach or even suggest all of the limitations of any of the independent claims, withdrawal of the § 102 rejections of claims 1, 11 and 21 is requested. Claims 2-10, 12-20 and 22-30 are patentable for at least the reason that these claims depend from an allowable claim.

CONCLUSION

In view of the foregoing, withdrawal of the remaining §§ 102, 103 and 112 rejections and a favorable action in form of a Notice of Allowance are requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504 (ITL.0548US).

Respectfully submitted,

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Fred G. Pruner, Jr., Registration No. 40,779  
TROP, PRUNER & HU, P.C.  
8554 Katy Freeway, Suite 100  
Houston, TX 77024  
(713) 468-8880  
(713) 468-8883 FAX